

AMENDMENTS TO THE CLAIMS

1. (currently amended) A probe An electrode for at least one of: intravascular stimulation, cardioversion and and/or defibrillation of a heart with an electrical or magnetic pulse or shock generated by a stimulation unit, said probe comprising:

a metallic, electrically conductive tubular wire unit, having an interior lumen that does not impede the flow of blood therethrough; and

a feed line, arranged in axial succession with and connected to an end of the wire unit, such that the feed line electrically communicates the stimulation unit to the wire unit;

wherein the wire unit is adapted to be deployed in the blood vessel in a first state and expanded into a second state in which the wire unit is adapted to be in electrically conductive relationship with an interior wall of the blood vessel a stimulation probe which can be fixed in a blood vessel of the body and by way of which electrical or magnetic pulses and defibrillation/cardioversion shocks can be delivered, the probe being provided with a feed line, wherein a metallic, electrically conductive, tubular wire unit adjoins the feed line in the axial direction, forms an expansion body, can be deployed in the corresponding vessel and bears against the wall of the vessel from the interior thereof under expansion.

*Lumen doesn't
impede blood
flow, i.e.
what is the
lumen?*

2. (currently amended) The probe electrode as set forth in claim 1, further comprising: wherein an inflatable balloon body for expanding the wire unit from the first state to the second state, the wire unit being is provided as a drive means for expansion in the interior of the wire unit, which is plastically deformable.

3. (currently amended) The probe electrode as set forth in claim 1 wherein the wire unit resiliently self-expands expands itself from a pre-stressed compressed condition in the first state to the second state inside the vessel.

4. (currently amended) The probe electrode of claim 1 wherein the stimulation unit stimulates, in a unipolar manner, of the entire surface of the wire unit acts as a unipolar stimulation pole.

5. (currently amended) The probe electrode of claim 1 wherein the wire unit is a cylindrical coil.

6 (currently amended) The probe of electrode as set forth in claim 5 wherein the cylindrical coil comprises a plurality of coil portions, the portions being electrically insulated from each other.

7. (currently amended) The probe electrode of claim 5 wherein an induction unit, comprising an induction coil, inductively supplies the electrode with voltage.

8. (currently amended) The probe electrode of claim 1 wherein a radial diameter of the wire unit changes in a longitudinal direction thereof.

9. (currently amended) The probe of electrode as set forth in claim 8, wherein characterised in that the wire unit is of a conical configuration.

10. (currently amended) The probe electrode of claim 1 wherein a surface of the wire unit is coated with a medicament.

11. (currently amended) The probe of electrode as set forth in claim 7 wherein the induction unit inductively heats the electrode.

12. (currently amended) The probe electrode of claim 1 wherein a further portion of the feed line extends in the axial direction parallel at least to a portion of the wire unit, such portion in electrically insulated relationship therewith.

13. (currently amended) The probe electrode of claim 1, further comprising wherein a control unit that is electrically communicated to the wire unit and that provides at least one control signal thereto.

Sub C1
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14. (currently amended) The probe electrode of claim 2 wherein the balloon body is adapted to be pneumatically inflatable.

15. (currently amended) The probe electrode of claim 2 wherein the balloon body is adapted to be hydraulically inflatable.

16. (currently amended) The probe electrode of claim 6 wherein an induction unit, comprising an induction coil, inductively supplies the electrode with voltage.

17. (currently amended) The probe electrode of claim 10 wherein the medicament is a substance for preventing vessel damage.

18. (currently amended) The probe electrode of claim 1 wherein the entire surface of the wire unit is divided into at least two electrically mutually insulated portions to provide a multipolar stimulation pole.

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19. (new) The probe of claim 1, wherein the feed line is terminated with a ring to form a bipolar reference electrode.